

HIGHLY TRANSPARENT THERMOFORMABLE POLYAMIDE FILM

ABSTRACT OF THE DISCLOSURE

Described is a thermoformable film comprising at least one layer (I) of polyamide containing solid anisotropic fillers (A) and individual spherulites. The anisotropic fillers (A) of the layer (I) of the thermoformable film, in a number-weighted average of all the dispersed constituents of the anisotropic fillers (A), have a dimension of no more than 10 nm in at least one first direction (r1) freely selectable for each dispersed constituent and, in at least one second direction (r2) perpendicular to the first direction (r1), have a dimension of at least 50 times the dimension in the first direction (r1). The individual spherulites in the layer (I) have a number-average distance from each other of no more than 50 nm, and the cores of a majority of the individual spherulites in the layer (I) are free of a filler particle of the anisotropic fillers (A). Also described is a method of preparing the thermoformable films of the present invention, and methods of using the films for, for example, packaging foodstuffs.

**HIGHLY TRANSPARENT THERMOFORMABLE POLYAMIDE FILM**

## ABSTRACT OF THE DISCLOSURE

Described is a thermoformable film comprising at least one layer (I) of polyamide containing solid anisotropic fillers (A) and individual spherulites. The anisotropic fillers (A) of the layer (I) of the thermoformable film, in a number-weighted average of all the dispersed constituents of the anisotropic fillers (A), have a dimension of no more than 10  $\mu$ m in at least one first direction (r1) freely selectable for each dispersed constituent and, in at least one second direction (r2) perpendicular to the first direction (r1), have a dimension of at least 50 times the dimension in the first direction (r1). The individual spherulites in the layer (I) have a number-average distance from each other of no more than 50 nm, and the cores of a majority of the individual spherulites in the layer (I) are free of a filler particle of the anisotropic fillers (A). Also described is a method of preparing the thermoformable films of the present invention, and methods of using the films for, for example, packaging foodstuffs.